UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/680,347	10/07/2003	Loretta A. Fitzgerald	2003P11395 US01	5658

7590 09/26/2007

Alexander J. Burke
Intellectual Property Department
5th Floor
170 Wood Avenue South
Iselin, NJ 08830

EXAMINER	
RAMIREZ, JOHN FERNANDO	

ART UNIT	PAPER NUMBER
3737	

MAIL DATE	DELIVERY MODE
09/26/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

Office Action Summary	**Application No.** 10/680,347	**Applicant(s)** FITZGERALD, LORETTA A.	
	Examiner John F. Ramirez	**Art Unit** 3737	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 June 2007*.
2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☐ Claim(s) _____ is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) *1-18* is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a)☐ All b)☐ Some * c)☐ None of:
1.☐ Certified copies of the priority documents have been received.
2.☐ Certified copies of the priority documents have been received in Application No. _____.
3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date *6/15/07*.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 06/27/07 has been entered.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 3, 7, 9 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Wessol et al. (US 6,965,847), in view of Burdette et al. (US 6,129,670), Kestin et al.** *"Pathologic evidence of dose-response and dose-volume relationships for prostate cancer treated with combined external beam radiotherapy and high-dose-rate brachytherapy"*, **Helmick et al.** *"Evaluation of post-plan dosimetry using TRUS and CT after transperineal prostate seed implant"*.

Wessol et al., teaches a computer readable media for developing a dosimetry plan for a treatment area (abstract), Wessol et al. does not specifically disclose the use of combined therapeutic dose value of radiation from internal and external sources to aid in scheduling and managing a sequence of tasks involved in producing a treatment plan, and a workflow processor for scheduling and managing a sequence of tasks in producing a treatment plan including the combined dose value. However, medical treatment systems for the application of radiation treatment planning using the combined therapeutic dose value of radiation from internal and external sources to aid in scheduling and managing a sequence of tasks involved in producing a treatment plan, and having a workflow processor for scheduling and managing a sequence of tasks in producing a treatment plan including the combined dose value, are conventional in the art as evidenced by the teachings of **Burdette et al. (US 6,129,670), Kestin et al.** *"Pathologic evidence of dose-response and dose-volume relationships for prostate cancer treated with combined external beam radiotherapy and high-dose-rate brachytherapy"*, **Helmick et al.** *"Evaluation of post-plan dosimetry using TRUS and CT after transperineal prostate seed implant"*.

The Burdette et al. patent teaches a medical treatment system for the application of radiation treatment planning using the combined therapeutic dose value of radiation from internal and external sources to aid in scheduling and managing a sequence of tasks involved in producing a treatment plan, and having a workflow processor for scheduling and managing a sequence of tasks in producing a treatment plan including the combined dose value (see abstract, see fig. 1A and related description, col. 4, lines

38- 60, col. 2, lines 8-47,col. 45, lines 17-45,). Moreover, the Helmick et al. non-patent literature teaches a medical treatment system for the application of radiation treatment planning using the combined therapeutic dose value of radiation from internal and external sources to aid in scheduling and managing a sequence of tasks involved in producing a treatment plan, and having a workflow processor for scheduling and managing a sequence of tasks in producing a treatment plan including the combined dose value (abstract, see sections: Materials and Methods, Discussions/Conclusions). Furthermore, the Kestin et al. non-patent literature teaches a medical treatment system for the application of radiation treatment planning using the combined therapeutic dose value of radiation from internal and external sources to aid in scheduling and managing a sequence of tasks involved in producing a treatment plan, and having a workflow processor for scheduling and managing a sequence of tasks in producing a treatment plan including the combined dose value (see sections: Introduction, Methods and Materials).

Based on the above observations, for a person of ordinary skill in the art, modifying Wessol et al. with the above discussed enhancements would have been considered obvious in view of the conventionality of these enhancements.

Claims 2, 4-6, 8, and 10, 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Wessol et al. (US 6,965,847), in view of Burdette et al. (US 6,129,670), Kestin et al.** *"Pathologic evidence of dose-response and dose-volume relationships for prostate cancer treated with combined external beam radiotherapy and high-dose-rate brachytherapy"*, **Helmick et al.** *"Evaluation of post-plan dosimetry using*

TRUS and CT after transperineal prostate seed implant", **in further view of Good (US 6,099,457) and in further view of Widener et al. (2004/0236207).**

The Wessol et al. patent teaches all the limitations of the claimed subject matter as applied to claim 1, except for mentioning specifically that the input processor automatically acquires patient radiation survey record data from radiation survey equipment indicating: radiation levels emitted by a patient, and the storage processor stores the acquired patient radiation survey record data in the repository, a rules processor for initiating generation of an alert message for communication to a healthcare worker, in response to the combined therapeutic dose value, and automatically initiating generation of an alert message for communication to a healthcare worker, in response to determining inappropriate radiation settings of a radiation imaging or therapy device in response to said combined therapeutic dose value, wherein the input processor receives data identifying a radiation value emitted by a radiation source implanted within a patient and the storage processor stores the emitted radiation value and the combined value in the record associated with the patient, and wherein the storage processor stores the emitted radiation value and the combined therapeutic dose value in at least one of, (a) the same portion of the record and (b) a related record section of the record, to consolidate radiation related data in a particular patient record section, wherein the additional task is to be performed by at least one healthcare worker and comprises a prompt to a healthcare worker to perform an action.

However, medical treatment systems for the application of radiation treatment planning having an input processor that automatically acquires patient radiation survey record data from radiation survey equipment indicating: radiation levels emitted by a patient, and the storage processor stores the acquired patient radiation survey record data in the repository, a rules processor for initiating generation of an alert message for communication to a healthcare worker, in response to the combined therapeutic dose value, and automatically initiating generation of an alert message for communication to a healthcare worker, in response to determining inappropriate radiation settings of a radiation imaging or therapy device in response to said combined therapeutic dose value, wherein the input processor receives data identifying a radiation value emitted by a radiation source implanted within a patient and the storage processor stores the emitted radiation value and the combined value in the record associated with the patient, and wherein the storage processor stores the emitted radiation value and the combined therapeutic dose value in at least one of, (a) the same portion of the record and (b) a related record section of the record, to consolidate radiation related data in a particular patient record section, wherein the additional task is to be performed by at least one healthcare worker and comprises a prompt to a healthcare worker to perform an action, are considered conventional in the art as evidenced by the teachings of **Good (US 6,099,457) and Widener et al. (US 2004/0236207).**

The Good patent teaches the steps of combining the data representing the first and second dose by summing values representing the first and second dose to provide the combined dose value (col 3 lines 4-11, col 5 lines 39-47), wherein the input processor receives data identifying a radiation value emitted by a radiation source implanted within a patient and the storage processor stores the emitted radiation value and the combined value in the record associated with the patient. Moreover, the Widener et al. patent teaches the steps of a rules processor for initiating generation of an alert message for communication to a healthcare worker (see paragraph 181), in response to the combined dose value, storing the emitted radiation value and the combined value in at least one of, (a) the same portion of the record and (b) a related record section of the record, to consolidate radiation related data in a particular patient record section, wherein the additional task is to be performed by at least one healthcare worker and comprises a prompt to a healthcare worker to perform an action (see figure 2 and related description).

Based on the above observations, for a person of ordinary skill in the art, modifying the method disclosed by Wessol et al., with the above discussed enhancements to provide a therapy which combines low dose continuous radiation with higher dosage radiation for a more effective destruction of tumors.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John F. Ramirez whose telephone number is (571) 272-8685. The examiner can normally be reached on (Mon-Fri) 7:30 - 4:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian L. Casler can be reached on (571) 272-4956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JFR

ELENI MANTIS MERCADER
SUPERVISORY PATENT EXAMINER